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Vocabulary Readers

Under the Ocean



by Ruth Jacobs

Number of Words: 614

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Under the Ocean



by Ruth Jacobs



Strategy Focus

As you read about the ocean, think of **questions** to ask about the life forms there.



HOUGHTON MIFFLIN

BOSTON

Key Vocabulary

crustacean hard-shelled animal that usually lives in water

gelatinous thick and slow to flow

menagerie collection of animals

oceanographers scientists who study the sea

submersible craft that goes under water

tentacles long, stretchy limbs

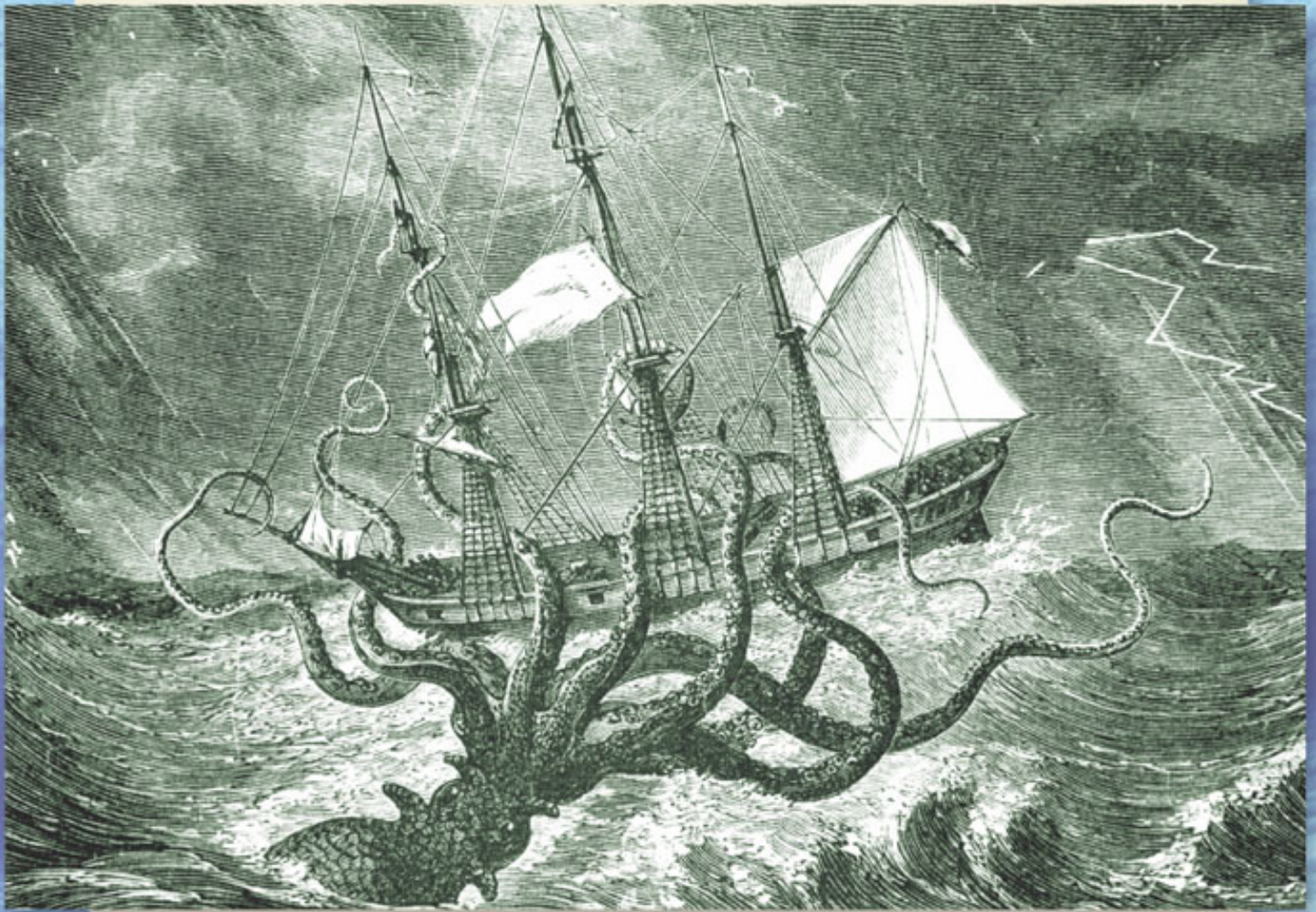
undulates moves in a smooth, wavelike motion

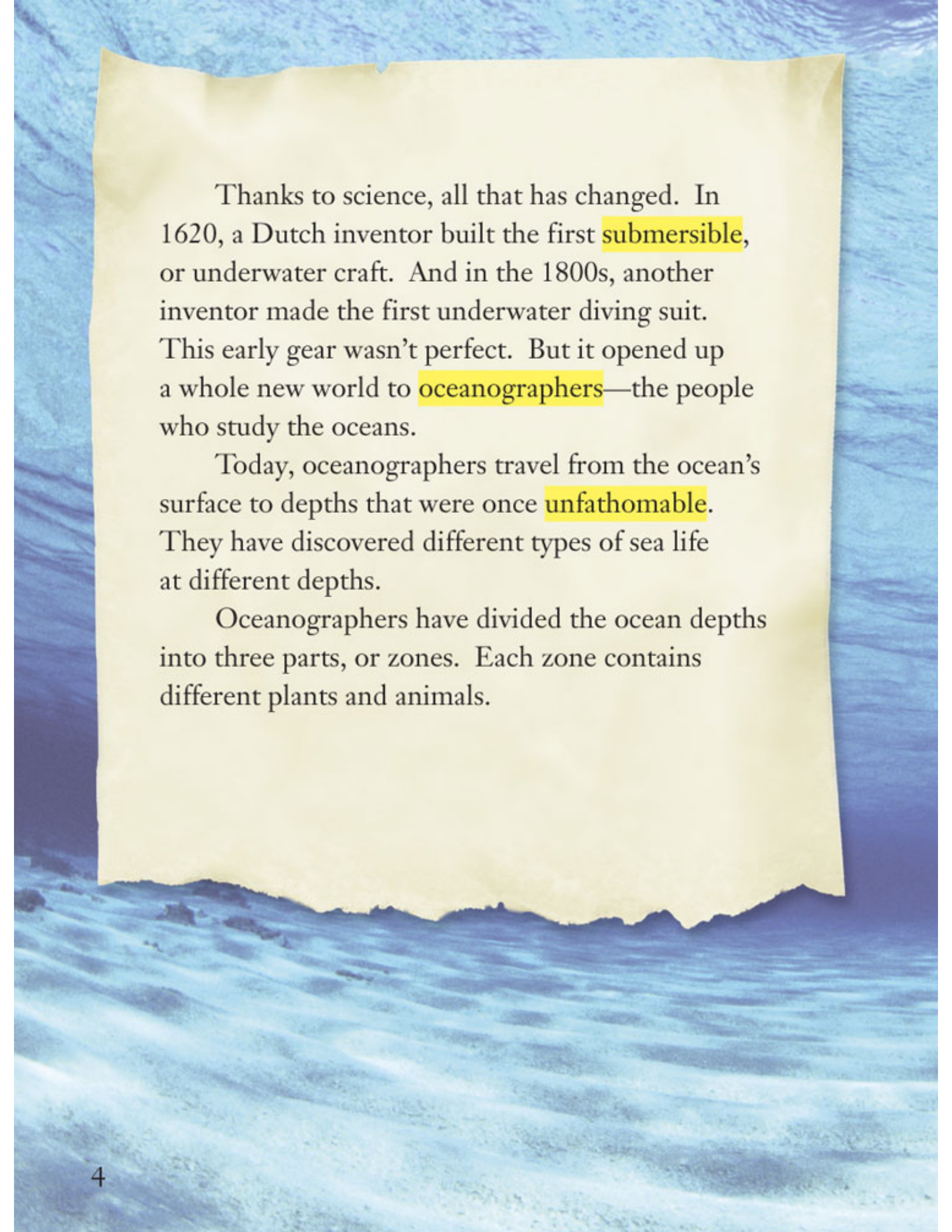
unfathomable impossible to measure

Word Teaser

It has a hard shell. It is not **gelatinous**. It has no **tentacles**.
What is this creature?

For a long time, life beneath the ocean's surface was a mystery. Once in a while, people caught a glimpse of deep-sea creatures. But no one really knew what might live in the undersea world.



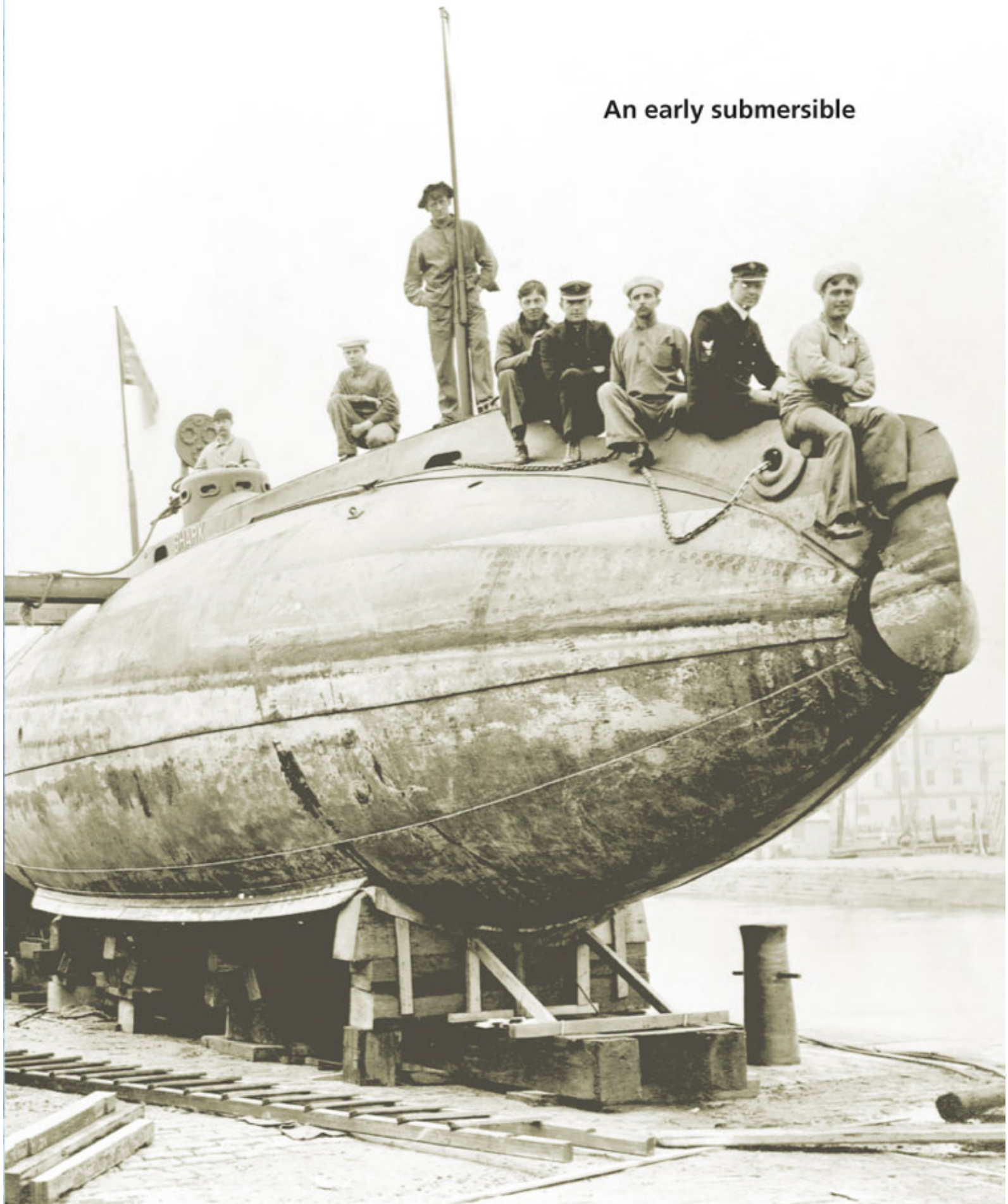
The background of the entire page is a photograph of ocean waves, showing white foam and deep blue water. A piece of aged, yellowed paper is pasted onto the upper half of the page, containing three paragraphs of text. The text is in a black serif font. The words "submersible", "oceanographers", and "unfathomable" are highlighted in yellow.

Thanks to science, all that has changed. In 1620, a Dutch inventor built the first **submersible**, or underwater craft. And in the 1800s, another inventor made the first underwater diving suit. This early gear wasn't perfect. But it opened up a whole new world to **oceanographers**—the people who study the oceans.

Today, oceanographers travel from the ocean's surface to depths that were once **unfathomable**. They have discovered different types of sea life at different depths.

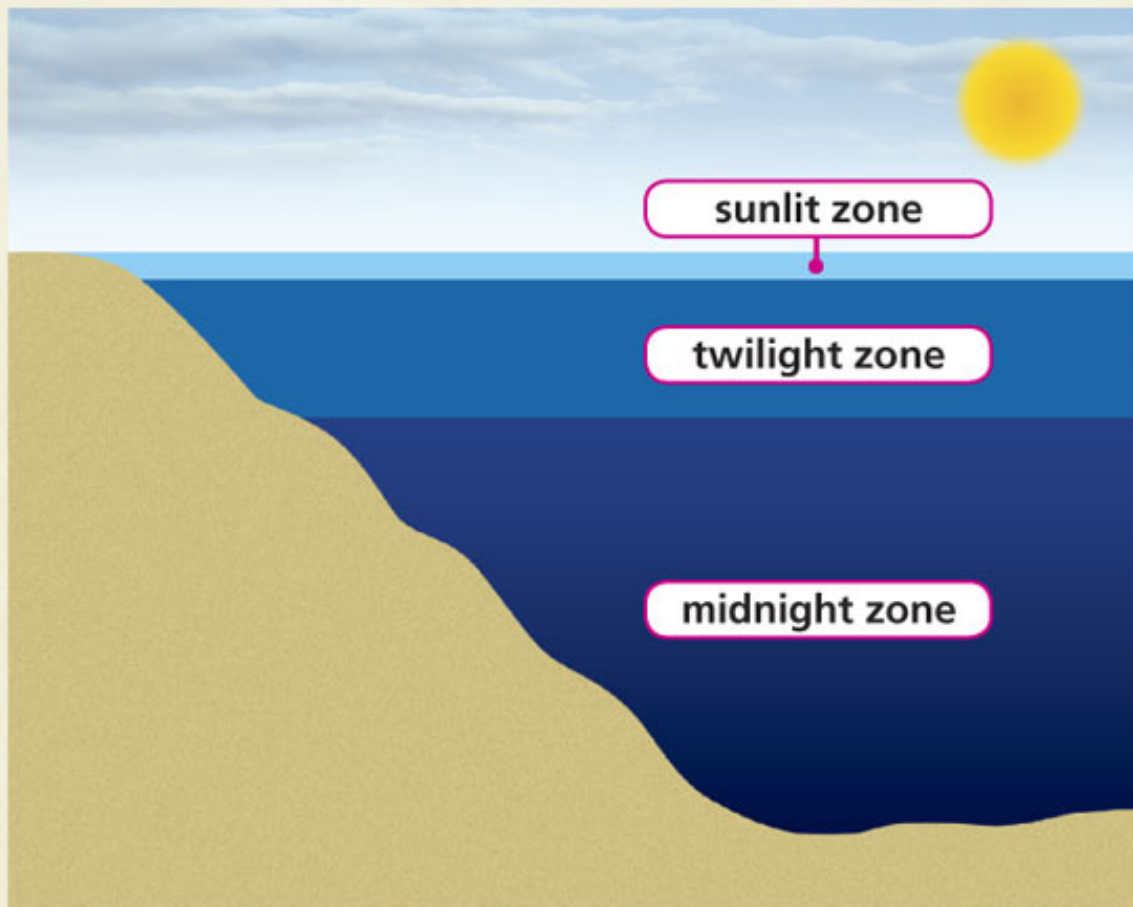
Oceanographers have divided the ocean depths into three parts, or zones. Each zone contains different plants and animals.

An early submersible

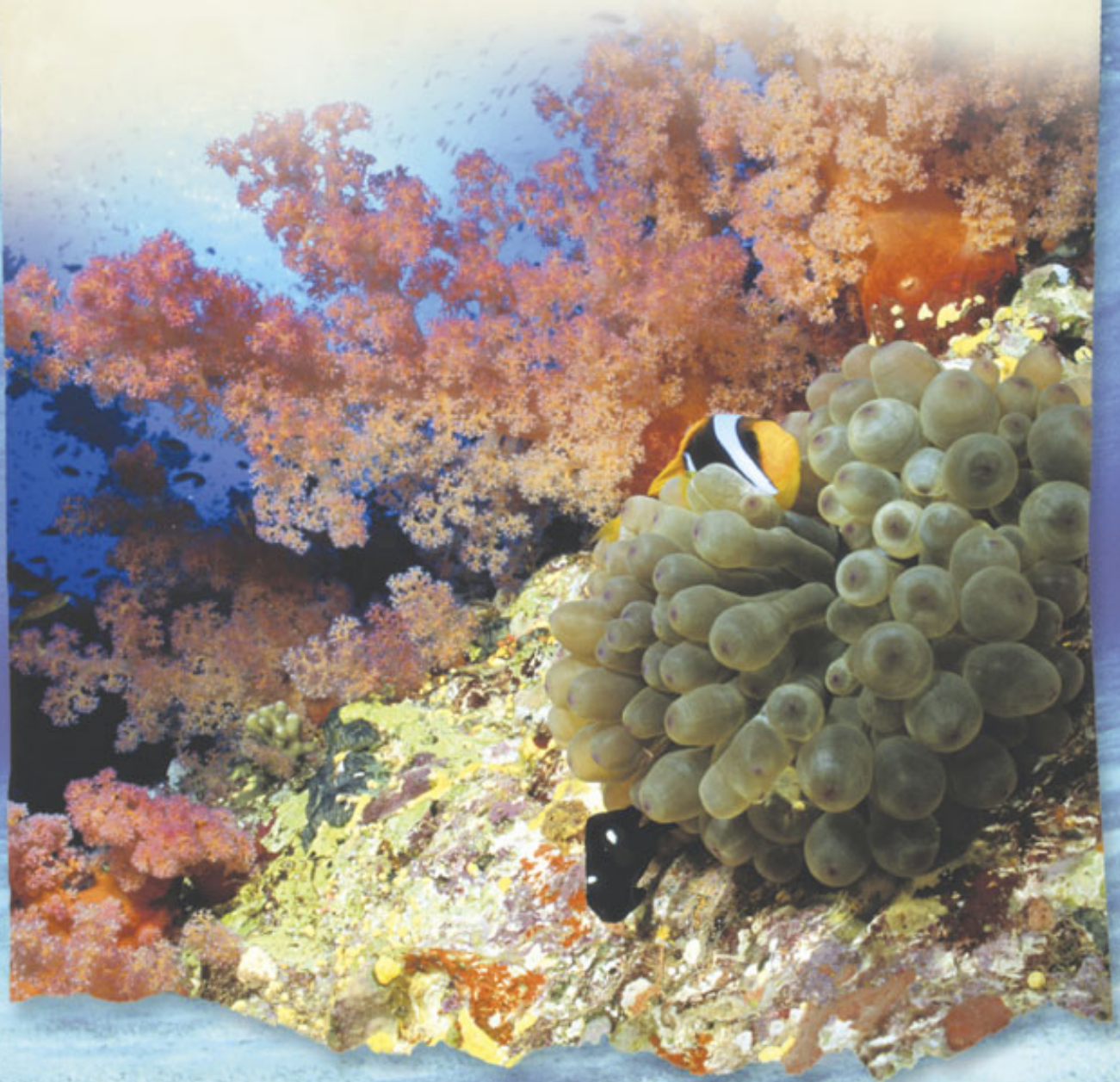


The Sunlit Zone

Put on your scuba gear and dive in. You've just entered the ocean's sunlit zone. Sunlight reaches the water from above. Plants use the sunlight to make food. The sunlit zone is about 600 feet deep.



Many plants grow in the sunlit zone. Most of these plants are tiny and drift in the water. They are an important food source for many ocean animals.



The sunlit zone is bursting with plankton. That means it attracts many other creatures as well. Clams and barnacles eat plankton. So do tiny, hard-shelled **crustaceans** and small fish such as herring.

Jellyfish float on the surface of the sunlit zone. Their **gelatinous** bodies **undulate** gently as they drift through the water.

crown jellyfish



Small crustaceans and fish provide food for bigger fish. They also provide food for marine mammals such as seals and whales. All sorts of animals feed in the sunlit zone. Most ocean creatures make this zone their home.

humpback whale



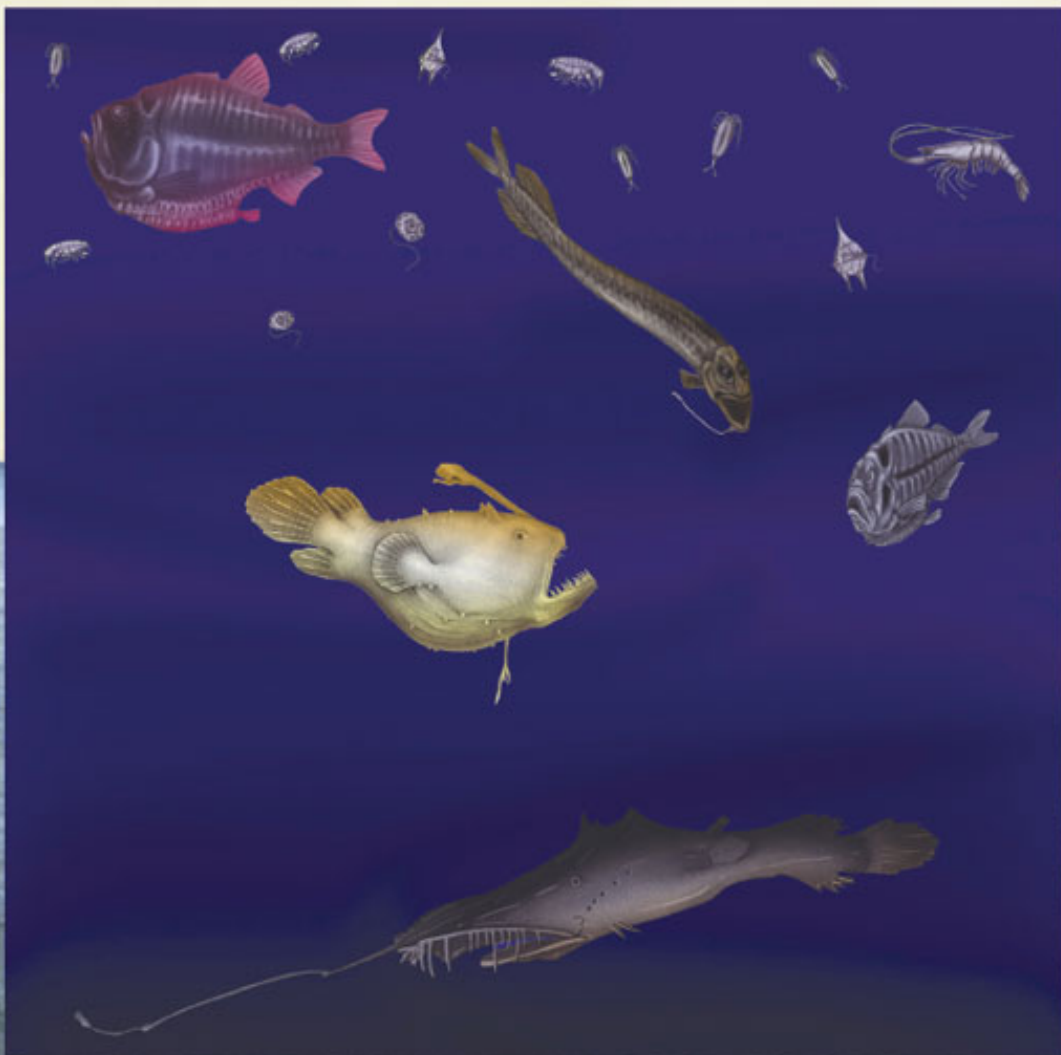
The Twilight Zone

Now let's go deeper into the ocean. Below the sunlit zone is the twilight zone. This zone goes from about 600 feet to about 3,000 feet below the surface. It's not safe for people to dive this deep without a submersible.



There isn't much light in the twilight zone. Some sunlight reaches this far down, but it isn't strong enough to keep plants alive.

Some animals of the twilight zone



Some kinds of microscopic animals live in the twilight zone. Some kinds of fish live here also. This environment isn't for everyone, though.

Darkness is one big problem. But some creatures have found ways to cope with it. For example, certain fish have body parts that glow. These glowing parts help attract smaller fish. They may also scare off enemies.



The bristlemouth fish glows in the dark seas.

There isn't much food in the twilight zone. That's one reason many creatures here are small. But fish in the twilight zone often have very large mouths. When they get the chance to eat, they want to swallow as much as possible!



The hatchetfish opens its wide mouth.

The Midnight Zone

Submersibles need strong lights to explore the third ocean zone. It's called the midnight zone. It goes from about 3,000 feet to more than 20,000 feet below the ocean's surface.

Down here, there is no light at all. The water is nearly freezing. The water pressure is tremendous. And the food is even scarcer. How can animals survive here?

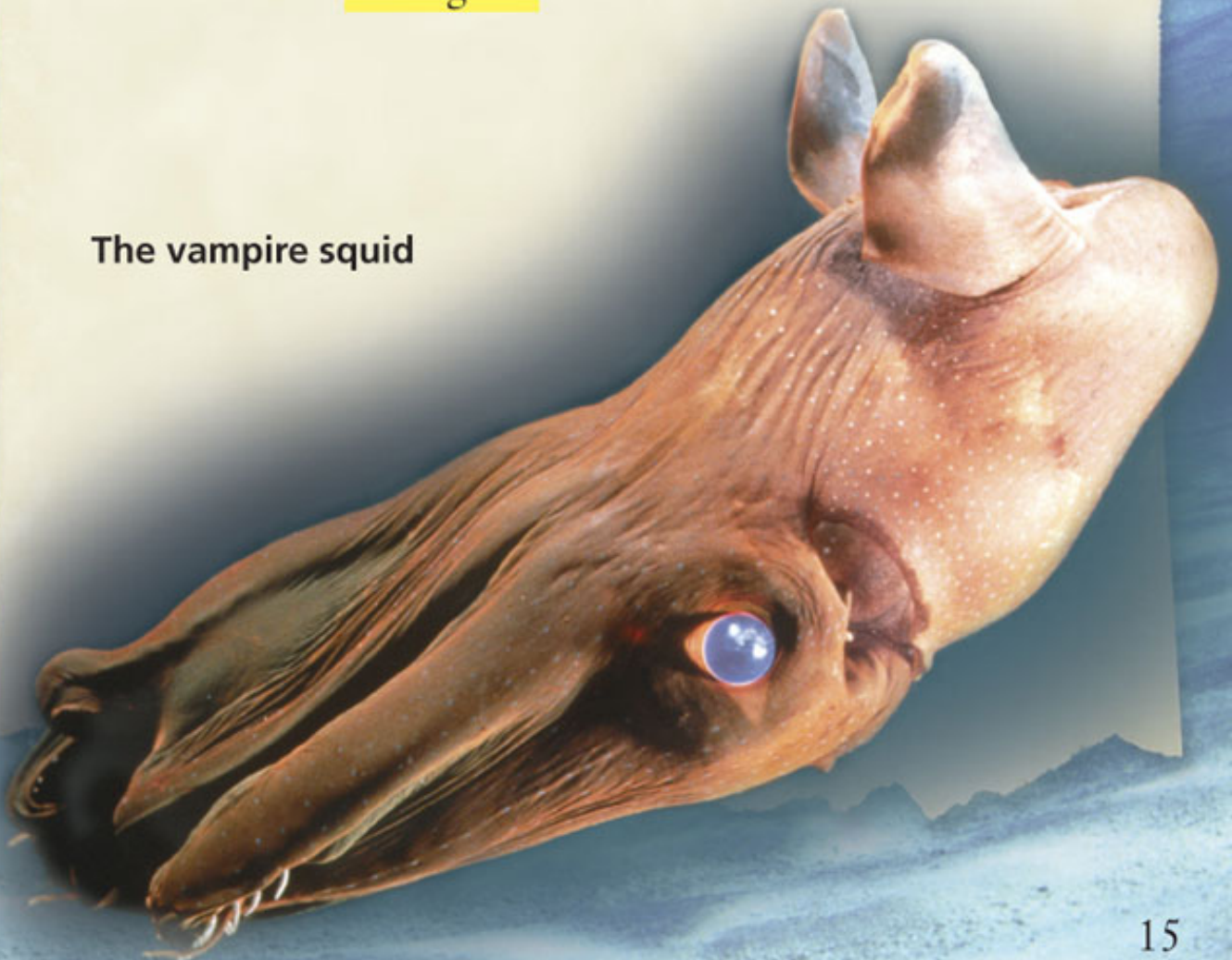
Some animals of the midnight zone



The vampire squid has huge eyes to help it see in the dark. It can make its body parts glow when it wants to hunt. It can turn off the glow when it wants to stay hidden. Its **tentacles** have sharp spines that may help it catch prey.

Some creatures in the midnight zone eat marine snow. It is made of dead plants, dead animals, and animal waste. It drifts down from above. Marine snow is an important source of food. And it's one more reason that the ocean is such an incredible **menagerie** of life.

The vampire squid



Responding

Putting Words to Work

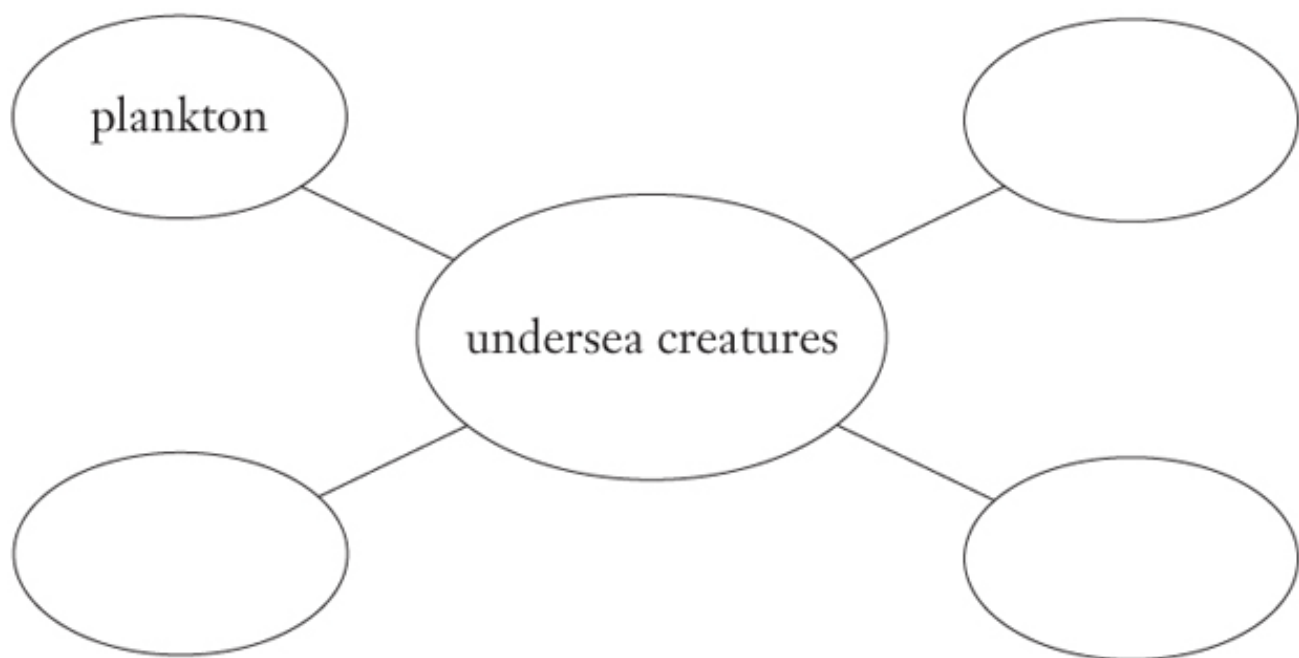
1. What is one difference between a **crustacean** and a jellyfish?
2. Would you like to explore the ocean in a **submersible**?
Why or why not?
3. Why did early ocean explorers think the oceans were **unfathomable**?
4. How might the vampire squid's **tentacles** help it to hunt for food?
5. **PARTNER ACTIVITY:** Think of a word you learned in the text. Explain its meaning to your partner and give an example.

Answer to Word Teaser

crustaceans

Word Builder

On an undersea voyage, you can discover a whole **menagerie** of creatures. Use the word web below to name some of the creatures you might find.



Write About It

Write a paragraph about taking a trip under the sea.
Use some of the words from your Word Builder web.

Key Vocabulary

crustacean
gelatinous
menagerie
oceanographers
submersible
tentacles
undulates
unfathomable

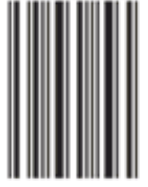
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